

IN THE CLAIMS:

1. (currently amended) An electric motor, comprising;
a stator core formed by an integrated set of a plurality of split core blocks;
and
a core section having a metallic connection housing that connects the individual split core blocks in dovetailed form to create one connected core section; and, said stator core being connected to the outer surface of the metallic connection housing;

wherein the dovetailed connections at said connection housing are plastically deformed by punching to remove the connection gap existing at each of the dovetailed connections.

2. (currently amended) An electric motor, comprising;
a rotor;
a stator;
a stator core constituting said stator;
a core section constituting said stator core;
a plurality of split core blocks constituting said core section; and
a metallic connection housing that connects said split core blocks in dovetailed form to create one connected core section; and, said stator core being connected to the outer surface of the metallic connection housing;

wherein said split core blocks are each formed of a laminated steel plate

plates, said connection housing is formed of a material softer than said laminated steel ~~plate~~ plates, and the dovetailed connections at said connection housing are plastically deformed by punching to remove the connection gap existing at each of the dovetailed connections.

3. (original) An electric motor as set forth in Claim 1, wherein said connection housing is formed of a material softer than said core section.

4. (currently amended) An motor, comprising:

a stator;

a rotor so positioned as to be freely rotatable around said stator;

a stator core that constituting said stator;

a core section constituting said stator core;

a plurality of split core blocks constituting said core section; and

a metallic connection housing connecting said split core blocks so as to form one integrated core section,

wherein ~~the~~ a magnetic pole tooth section formed by each of said split core blocks comprises a coil winding drum portion, an outer-surface magnetic pole portion provided at the outer-surface front end of said coil winding drum and spread in a circumferential direction, and a support portion provided at the inner-surface front end of the coil winding drum;

wherein said magnetic pole tooth section whose outer-surface magnetic

pole portion is positioned at the outer-surface side and whose coil winding drum is radially positioned is connected in dovetailed form to said connection housing positioned at the inner-surface side of said support portion;

wherein an engagement protrusion or engagement recess for dovetailed connection is provided on the inner surface of the support portion and an engagement protrusion or engagement recess for dovetailed connection is provided on the outer surface of the connection housing so as to fit into the engagement protrusion or engagement recess on the inner surface of the support portion; and

wherein the engagement protrusion or engagement recess for dovetailed connection, provided in the connection housing, is plastically deformed by punching from an axial direction of the stator core to remove the connection gap existing between the engagement protrusion and engagement recess that fit one another.

5. (currently amended) An electric motor, comprising:
- a stator;
 - a rotor positioned so as to be freely rotatable around said stator;
 - a stator core constituting said stator;
 - a core section constituting said stator core;
 - a plurality of split core blocks constituting said core section; and
 - a metallic connection housing connecting said split core blocks so as to form one integrated core section;

wherein ~~the~~ a magnetic pole tooth section formed by each of said split core blocks comprises a coil winding drum portion, an outer-surface magnetic pole portion provided at the outer-surface front end of said coil winding drum and spread in a circumferential direction, and a support portion provided at the inner-surface front end of the coil winding drum;

wherein said magnetic pole tooth section whose outer-surface magnetic pole portion is positioned at the outer-surface side and whose coil winding drum is radially positioned is connected in dovetailed form to said connection housing positioned at the inner-surface side of said support portion;

wherein an engagement recess for dovetailed connection is formed on the inner surface of the support portion and an engagement protrusion for dovetailed connection is formed on the outer surface of the connection housing so as to protrude from the outer surface of the connection housing to ensure a fit into the engagement recess on the inner surface of the support portion; and

wherein the engagement protrusion for dovetailed connection, provided on the connection housing, is plastically deformed by punching from an axial direction of the stator core to remove the connection gap existing between the engagement protrusion and engagement recess that fit one another.

6. (currently amended) An electric motor as set forth in Claim ~~from~~ 1, wherein said connection housing is formed by cold forging, or die-casting, ~~or the like.~~

7. (original) An electric motor as set forth in Claim 1, wherein the connection gap is of a level at which the volume of the metallic material extruded by said plastic deformation is permissible.

8. (currently amended) An electric motor as set forth in Claim 1, wherein said connection housing to which the dieing tool to be used for forming by means of said plastic deformation, such as a punch, is provided with ~~preholing~~, ~~prepunching~~ pre-holing, pre-punching, or other preliminary machining, to ensure guidance for supporting the dieing tool.

9. (currently amended) An electric motor as set forth in Claim 8, wherein said means of plastic deformation fastens split core blocks to said connection housing ~~and~~ in the lateral laminating direction of said laminated steel ~~plate~~ plates.

10. (original) An electric motor as set forth in Claim 4, wherein said plastic deformation flares said support portion in its circumferential direction to remove the adjacent gaps between the supports of said adjacent magnetic pole teeth.

11. (new) An electric motor, comprising:

a stator core formed by an integrated set of a plurality of split core blocks;

a core section having a metallic connection housing that connects the individual split core blocks in dovetailed form to create one connected core section; and

wherein the dovetailed connections at said connection housing are plastically deformed by punching from an axial direction of said stator core to remove the connection gap existing at each of the dovetailed connections.

12. (new) An electric motor manufacturing method for forming a stator core by integrating set of a plurality of split core blocks comprising:

connecting the individual split core blocks in dovetailed form to the outer surface side of a metallic connection housing;

deforming plastically the dovetailed connections at said connection housing by punching from an axial direction of said stator core to remove the connection gap existing at each of the dovetailed connections and to create one connected core section.

(Applicants' remarks are set forth herein below starting on the following page).